“Agency guidance does not carry the weight and authority of a codified federal regulation and does not provide the necessary clarity to assist state regulatory agencies with compliance and enforcement activities,” the petitioners say.

The petition also notes that the EPA has acknowledged its failure to provide Congress with a timely copy of the final rule, which was published in September 2015.

Under federal law, the EPA must provide the USDA and the House and Senate Agriculture Committees with a final copy of the regulations at least 30 days prior to it being signed by the EPA Administrator. The EPA sent a copy to the USDA, but did not forward copies to either committee. “EPA’s failure to meet its statutory obligations deprived Congress of its lawful expectation of examining the regulation before its promulgation,” according to the petition.

The petitioners criticise the inclusion of the “designated representative” provision, which allows farmworkers to designate a representative who can seek employer records on pesticide hazards and applications. The provision undermines protections for confidential business information and subjects farmers to “potential harassment and public criticism” for lawful use of EPA-approved pesticides, the groups say.

The EPA says that it will formally answer the petition, but has offered no timetable for responding and is under no set deadline to act.

Enviros press US EPA on pesticide mixtures

BY J R PEGG

Environmentalists are pressuring the US EPA to tackle the issue of pesticide mixtures, suggesting that the Agency is abdicating its responsibility to address the potential synergistic effects of pesticide products.

A coalition of 15 organisations, led by the Center for Biological Diversity (CBD), sent a letter last month urging the Agency to require agrochemical companies to provide data on pesticide synergy as part of the registration process. “The bottom line is whether the application of multiple ingredients can have a synergistic effect for certain combinations of pesticides,” the coalition says. “Without expressly requiring applicants to provide information on synergy, it is highly likely that the EPA is underestimating the negative impacts on the environment of pesticide exposure in its analyses.”

Absent new requirements, the EPA “cannot comply” with its duty under federal pesticide law to ensure that approval of pesticides will not cause harm to the environment and public health, the groups contend.

The December 21st letter is a follow-up by the coalition to a petition submitted to the EPA by the CBD in June 2016. The petition calls on the EPA to craft regulations to address synergies in pesticide products, but the Agency has yet to fully respond to the environmentalists’ demands.

The coalition sent the petition in the wake of controversy around the synergistic effects of Dow AgroSciences’ herbicide, Enlist Duo (2,4-D choline + glyphosate). A federal court remanded the Enlist Duo registration back to the EPA at the Agency’s request to address the product’s synergistic effects. In November, the EPA concluded that it had no concerns about the issue, but the environmentalists are unconvinced and want the Agency to also consider tank mixing of pesticide products.

“Many pesticide products on the market are likely more harmful than the EPA has previously assumed because some of the most common combinations of ingredients cause synergistic effects, and most pesticide product labels do not meaningfully limit tank mixtures or co-application,” the groups say. “Therefore, it is imperative that the EPA consider synergistic effects of pesticide products during its registration and registration review process, and include protective label restrictions to eliminate or mitigate adverse, synergistic environmental impacts.”

Isagro USA to distribute BioAg Alliance biofungicide

BY ANDY BEER

Monsanto and Danish company Novozymes’ BioAg Alliance has granted exclusive distribution rights in the US and Canada for its biofungicide, Taegro 2 (Bacillus subtilis var amyloliquefaciens strain FZB24), to Italian agrochemical company Isagro’s US business, Isagro USA (Morrisville, North Carolina). Taegro 2 provides broad-
spectrum protection of major soil-borne and foliar pests in fruit and vegetable crops, Isagro USA points out. “Taegro 2 fits strongly into the profile of our short- and long-term marketing strategy of offering a diverse biosolutions portfolio in the USA and Canada,” says Isagro USA president Mike Allan. The BioAg Alliance launched its first commercial product late last year. The Alliance was formed in early 2014.

**New US biopesticide applications**

**BY ANDY BEER**

The US EPA has notified receipt of applications to register several biopesticides based on new active ingredients. The applications would have been made some time ago.

BASF has submitted an application for the biofungicidal seed treatment, Velondis Flex (Bacillus subtilis strain BU1814 1.7%). It has also applied to register the combination products, Velondis Extra (B subtilis strain BU1814 0.2% + B amyloliquefaciens strain MBI 600 3.9%) and Velondis Plus (B subtilis strain BU1814 1.7% + B amyloliquefaciens strain MBI 600 3.1%), as biofungicidal seed treatments.

US specialty agrochemical company SePRO Corporation (Carmel, Indiana) has applied to register the biofungicide, Zio (Pseudomonas chlororaphis strain AF5009 50%), for use on turf and ornamentals. The company plans to introduce the product under an agreement with the US agricultural biotechnology business, AgBiome Innovations. The EPA recently notified receipt of an application to register AgBiome’s P chlororaphis strain AF5009-based biofungicides, Howler T&O, for use on turf and ornamentals, and Howler, for use on crops including fruit, nuts, vegetables, peanuts, soybeans, wheat, tobacco, turf and ornamentals.

The consultancy firm, Technology Sciences Group, on behalf of Canadian company Bee Vectoring Technologies (BVT - Mississauga, Ontario), has submitted an application for the biofungicide, Vectorite with CR-7 (Clonostachys rosea strain CR-7 4.2%), for agricultural use. BVT indicated in August that it had applied for its first biofungicide approval for use on fruit and vegetable crops. The company is seeking to use commercially reared bumble bees as the application method for the product.

**Monsanto/Broad Institute in advanced CRISPR licensing deal**

**BY ANDY BEER**

Monsanto has entered into a further licensing agreement with the US non-profit research organisation, Broad Institute of MIT and Harvard, over CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) genome editing technology. The Institute has granted Monsanto a non-exclusive global licence for agricultural applications of the CRISPR-Cpf1 system. The latter has the potential to be a simpler and more precise tool for making targeted improvements in a cell’s DNA compared with the more established CRISPR-Cas9 system, Monsanto points out. The smaller size of the CRISPR-Cpf1 system provides researchers more flexibility to use the genome editing technology across multiple crops, the company adds. Monsanto entered into a licensing agreement for CRISPR-Cas technology with the Broad Institute last year. The Institute is run in partnership with the US Massachusetts Institute of Technology and Harvard University.

**Origin accesses DuPont maize seed in US**

**BY ANDY BEER**

Chinese agricultural biotechnology company Origin Agritech (Beijing) has entered into an agreement with DuPont seed subsidiary DuPont Pioneer to gain access to non-genetically modified maize seed in the US. Origin expects to commercialize seed products available for sale in the US market for spring 2017 planting.

The deal with DuPont Pioneer represents the first step towards launching Origin’s “strategic pillar III” focused on non-GMO and organic crop markets. “We look forward to offering these products to US farmers through a novel, digitally-enabled route to market while building a platform from which Origin can continue to grow,” says chief executive officer Bill Niebur.